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(54) Title: COMPATIBILIZED THERMOPLASTIC VULCANIZATE BLENDS AND THEIR MORPHOLOGY AS DETERMINED BY ATOMIC FORCE MICROSCOPY

(57) Abstract: Thermoplastic Vulcanizate (TPV) blends are disclosed wherein the otherwise generally compatible blend of thermoplastic and crosslinked elastomer is made unexpectedly more compatible on the nano-scale, as evaluated Atomic Force Microscopy (AFM). The blends comprise a polyolefin matrix, domains of well-dispersed crosslinked olefinic rubber particles and the presence between the rubber particles of ligaments of a compatibilizing copolymer comprising olefin monomeric units and aromatic monomeric units. The addition of the compatibilizer increased the dispersion of olefinic rubber particles.

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